

Remarks

Claims 1-16 are pending in this application. Applicants have amended claims 1-3, 6, and 8-16 to clarify the present invention. Applicants respectfully request favorable reconsideration of this application.

Applicants submit herewith under separate cover two sheets of replacement drawings including Figs. 3, 4, and 7. Applicants have added reference numbers 8, 9, and 10 to Fig. 4 and 18 to Fig. 7. These reference numbers are all described in the specification. Accordingly, Applicants respectfully request withdrawal of the objection to the specification.

Applicants are obtaining a certified copy of the priority document and will submit it at a future date.

Applicants have amended claims 1 and 9 to include a transitional phrase. Accordingly, Applicants respectfully request withdrawal of the objection to the disclosure.

The Examiner rejected claims 1, 8, 9, 13, 14, and 16 under 35 U.S.C. § 102(b) as being anticipated by U.S. patent 4,984,172 to Luminari, which we cited in an information disclosure statement. The Examiner rejected claims 2, 7, 10, and 15 under 35 U.S.C. § 103(a) as being unpatentable over Luminari in view of U.S. patent 4,168,489 to Ervin. The Examiner rejected claims 3-6, 11, and 12 under 35 U.S.C. § 103(a) as being unpatentable over Luminari in view of Ervin and further in view of U.S. patent 5,490,100 to Kableshkov.

Luminari does not disclose the present invention as recited in independent claims 1 and 9 since, among other things, Luminari does not disclose a method or apparatus for imaging characteristics of an object utilizing measuring of scattered light about the object. Scatter in this context is not to be confused with light diffusively reflected from the surface. Rather, Luminari discloses a three-dimensional-sheet-of-light-system, wherein 3D and intensity is used to detect defects. Luminari does not, however, disclose scattered light. Scattered light is light that penetrates the material of an object and after scattering is registered when it emerges from the material at a different location from the point at which the light entered. That is, the penetrated light is spread within the material of the object, such as through a surface layer. How this occurs depends on the internal characteristics of the material. Additionally, Luminari does not disclose utilizing scattered light in combination with reflected light to image characteristics of an object. It follows that Luminari does not disclose an apparatus for imaging characteristics of an object utilizing measuring of scattered light about the object. Therefore, Luminari does not disclose the present invention as recited in claims 1, 8, 9, 13, 14, and 16.

In view of the above, Luminari does not disclose all elements of the present invention as recited in claims 1, 8, 9, 13, 14, and 16. Since Luminari does not disclose all elements of the present invention as recited in claims 1, 8, 9, 13, 14, and 16, the present invention, as recited in claims 1, 8, 9, 13, 14, and 16, is not properly rejected under 35 U.S.C. § 102(b). For an anticipation rejection under 35 U.S.C. § 102(b) no difference may exist between the claimed invention and the reference disclosure. *See Scripps Clinic and Research Foundation v. Genentech, Inc.*, 18 U.S.P.Q. 841 (C.A.F.C. 1984).

Along these lines, anticipation requires the disclosure, in a cited reference, of each and every recitation, as set forth in the claims. *See Hodosh v. Block Drug Co.*, 229 U.S.P.Q. 182 (Fed. Cir. 1986); *Titanium Metals Corp. v. Banner*, 227 U.S.P.Q. 773 (Fed. Cir. 1985); *Orthokinetics, Inc. v. Safety Travel Chairs, Inc.*, 1 U.S.P.Q.2d 1081 (Fed. Cir. 1986); and *Akzo N.V. v. U.S. International Trade Commissioner*, 1 U.S.P.Q.2d 1081 (Fed. Cir. 1986).

The combination of Luminari and Ervin does not suggest the present invention as recited in claims 2 and 7, which depend from claim 1, or claims 10 and 15, which depend from claim 9, since, among other things, the combination of Luminari and Ervin does not suggest a method or apparatus for imaging characteristics of an object utilizing measuring of scattered light about the object. Additionally, the combination of Luminari and Ervin does not suggest a method or apparatus utilizing scattered light in combination with reflected light to image characteristics of an object. Luminari suggests a three-dimensional-sheet-of-light-system, wherein 3D and intensity is used to detect defects. On the other hand, Ervin suggests a display system in which the number of rows is reduced. As such, Ervin does not appear to have any relevance to the present invention as recited in claims 2, 7, 10 and 15. According to the present invention as recited in these claims, data is compressed in order to be able to measure 3D and scatter simultaneously.

One of ordinary skill in the art would not combine Luminari and Ervin, since neither references suggests scattered light. In fact, since neither Luminari nor Ervin suggests scattered light, one of ordinary skill in the art would not look to either reference for a solution to imaging

characteristics of an object utilizing scattered light. Additionally, since neither Luminari nor Ervin suggests scattered light, neither reference suggests the present invention as recited in claims 2, 7, 10, or 15. Therefore, the combination of Luminari and Ervin does not suggest the present invention as recited in claims 2, 7, 10 and 15.

The combination of Luminari, Ervin and Kableshkov does not suggest the present invention as recited in claims 3-6, 11, and 12 since, among other things, the combination does not suggest a method or apparatus for imaging characteristics of an object utilizing measuring of scattered light about the object or a method or apparatus utilizing scattered light in combination with reflected light to image characteristics of an object. Kableshkov relates to an electronic summation unit, which does not suggest scattered light or utilizing scattered light to image characteristics of an object. Therefore, the combination of Luminari, Ervin and Kableshkov does not suggest the present invention as recited in claims 3-6, 11, and 12.

In view of the above, the references relied upon in the office action, whether considered alone or in combination, do not disclose or suggest patentable features of the present invention. Therefore, the references relied upon in the office action, whether considered alone or in combination, do not anticipate the present invention or make the present invention obvious. Accordingly, Applicants respectfully request withdrawal of the rejection based upon the cited references.

In conclusion, Applicants respectfully request favorable reconsideration of this case and early issuance of the Notice of Allowance.

If an interview would advance the prosecution of this application, Applicants respectfully urge the Examiner to contact the undersigned at the telephone number listed below.

The undersigned authorizes the Commissioner to charge fee insufficiency and credit overpayment associated with this communication to Deposit Account No. 22-0261.

Respectfully submitted,

Date: 8/1/07


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